

# BUNN®

## SLCA-7



## INSTALLATION & OPERATING MANUAL

### BUNN-O-MATIC CORPORATION

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To ensure you have the latest revision of the Operating Manual, or to view the Illustrated Parts Catalog, Programming Manual, or Service Manual, please visit the Bunn-O-Matic website, at [www.bunn.com](http://www.bunn.com). This is absolutely FREE, and the quickest way to obtain the latest catalog and manual updates. For Technical Service, contact Bunn-O-Matic Corporation at 1-800-286-6070.



## BUNN-O-MATIC COMMERCIAL PRODUCT WARRANTY

Bunn-O-Matic Corp. ("BUNN") warrants equipment manufactured by it as follows:

- 1) Airpots, thermal carafes, decanters, GPR servers, iced tea/coffee dispensers, MCP/MCA pod brewers thermal servers and Thermofresh servers (mechanical and digital)- 1 year parts and 1 year labor.
- 2) All other equipment - 2 years parts and 1 year labor plus added warranties as specified below:
  - a) Electronic circuit and/or control boards - parts and labor for 3 years.
  - b) Compressors on refrigeration equipment - 5 years parts and 1 year labor.
  - c) Grinding burrs on coffee grinding equipment to grind coffee to meet original factory screen sieve analysis - parts and labor for 4 years or 40,000 pounds of coffee, whichever comes first.

These warranty periods run from the date of installation BUNN warrants that the equipment manufactured by it will be commercially free of defects in material and workmanship existing at the time of manufacture and appearing within the applicable warranty period. This warranty does not apply to any equipment, component or part that was not manufactured by BUNN or that, in BUNN's judgment, has been affected by misuse, neglect, alteration, improper installation or operation, improper maintenance or repair, non periodic cleaning and descaling, equipment failures related to poor water quality, damage or casualty. In addition, the warranty does not apply to replacement of items subject to normal use including but not limited to user replaceable parts such as seals and gaskets. This warranty is conditioned on the Buyer 1) giving BUNN prompt notice of any claim to be made under this warranty by telephone at (217) 529-6601 or by writing to Post Office Box 3227, Springfield, Illinois 62708-3227; 2) if requested by BUNN, shipping the defective equipment prepaid to an authorized BUNN service location; and 3) receiving prior authorization from BUNN that the defective equipment is under warranty.

**THE FOREGOING WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTY, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF EITHER MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** The agents, dealers or employees of BUNN are not authorized to make modifications to this warranty or to make additional warranties that are binding on BUNN. Accordingly, statements by such individuals, whether oral or written, do not constitute warranties and should not be relied upon.

If BUNN determines in its sole discretion that the equipment does not conform to the warranty, BUNN, at its exclusive option while the equipment is under warranty, shall either 1) provide at no charge replacement parts and/or labor (during the applicable parts and labor warranty periods specified above) to repair the defective components, provided that this repair is done by a BUNN Authorized Service Representative; or 2) shall replace the equipment or refund the purchase price for the equipment.

**THE BUYER'S REMEDY AGAINST BUNN FOR THE BREACH OF ANY OBLIGATION ARISING OUT OF THE SALE OF THIS EQUIPMENT, WHETHER DERIVED FROM WARRANTY OR OTHERWISE, SHALL BE LIMITED, AT BUNN'S SOLE OPTION AS SPECIFIED HEREIN, TO REPAIR, REPLACEMENT OR REFUND.**

In no event shall BUNN be liable for any other damage or loss, including, but not limited to, lost profits, lost sales, loss of use of equipment, claims of Buyer's customers, cost of capital, cost of down time, cost of substitute equipment, facilities or services, or any other special, incidental or consequential damages.

392, A Partner You Can Count On, Air Infusion, AutoPOD, AXIOM, BrewLOGIC, BrewMETER, Brew Better Not Bitter, BrewWISE, BrewWIZARD, BUNN Espresso, BUNN Family Gourmet, BUNN Gourmet, BUNN Pour-O-Matic, BUNN, BUNN with the stylized red line, BUNNlink, Bunn-O-Matic, Bunn-O-Matic, BUNNserve, BUNNSERVE with the stylized wrench design, Cool Froth, DBC, Dr. Brew stylized Dr. design, Dual, Easy Pour, EasyClear, EasyGard, FlavorGard, Gourmet Ice, Gourmet Juice, High Intensity, iMIX, Infusion Series, Intellisteam, My Café, Phase Brew, PowerLogic, Quality Beverage Equipment Worldwide, Respect Earth, Respect Earth with the stylized leaf and coffee cherry design, Safety-Fresh, savemycoffee.com, Scale-Pro, Silver Series, Single, Smart Funnel, Smart Hopper, SmartWAVE, Soft Heat, SplashGard, The Mark of Quality in Beverage Equipment Worldwide, ThermoFresh, Titan, trifecta, Velocity Brew, Air Brew, Beverage Bar Creator, Beverage Profit Calculator, Brew better, not bitter., BUNNSource, Coffee At Its Best, Cyclonic Heating System, Daypart, Digital Brewer Control, Element, Milk Texturing Fusion, Nothing Brews Like a BUNN, Pouring Profits, Signature Series, Sure Tamp, Tea At Its Best, The Horizontal Red Line, Ultra are either trademarks or registered trademarks of Bunn-O-Matic Corporation. The commercial trifecta® brewer housing configuration is a trademark of Bunn-O-Matic Corporation.

## INTRODUCTION

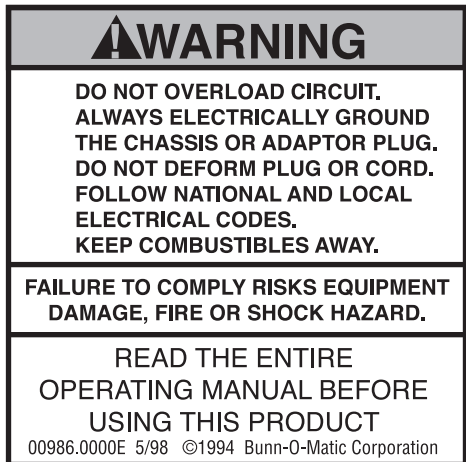
This equipment dispenses hot beverages or soups on demand from powdered product. It is indoor use only on a sturdy counter or shelf.

## TABLE OF CONTENTS

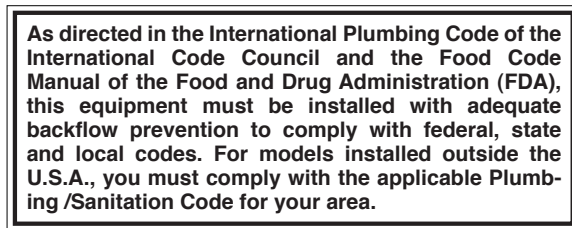
Introduction .....	3
User Notices .....	4
Initial Set-up .....	5
Electrical Requirements .....	5
Electrical Hook-up.....	5
Plumbing Requirements .....	5
Plumbing Hook-up .....	5
Operating Controls.....	6
Installing Pump Tubing .....	8
Initial Fill & Heat.....	9
Liquid Level Control .....	9
Rinse Alarm Feature.....	9
Programming The Dispenser .....	10
Program Mode.....	10
Priming The Concentrate Lines.....	13
Draining The Hot Water Tank .....	14
Operating The Dispenser.....	14
Cleaning And Preventive Maintenance .....	15
Daily Rinsing.....	15
Daily Parts Washing .....	15
Weekly Sanitizing .....	15
Weekly Parts Washing .....	16
Preventive Maintenance .....	17
Replacing The Pump Tubing .....	17
Calibrating The Dispenser .....	18
Troubleshooting Guide .....	20
Field Calibration of the Concentrate Pumps .....	21
Calibrating of the Concentrate Pumps.....	21
Calibration the Dispenser Flow Rate.....	22
Field Calibrating the Empty Product Warning.....	22
Field Adjustment of Powder Hoppers.....	23
Electrical Wiring Schematics.....	24

## USER NOTICES

The notices on this dispenser should be kept in good condition. Replace unreadable or damaged labels.



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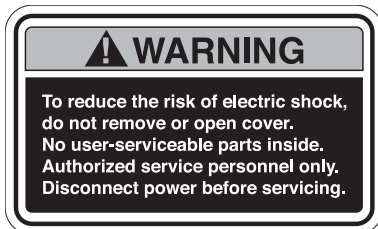
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37881.0000



39474.0000



39591.0000

## INITIAL SET-UP

1. Apply the four non-skid pads from the parts box to the bottom of the legs.
2. Remove the drip tray assembly and drip tray bracket from the parts box.
3. Place a set of key holes in the drip tray bracket over the lower two screws in the panel below the hopper access door; push down gently and tighten screws.

## ELECTRICAL REQUIREMENTS

**CAUTION** - The dispenser must be disconnected from the power source until specified in *Electrical Hook-Up*. The dispenser can be wired to a 120V, 2 wire with ground.

***Refer to the dispenser's dataplate for exact voltage requirements.***

## ELECTRICAL HOOK-UP

**CAUTION** – Improper electrical installation will damage electronic components.

1. An electrician must provide electrical service as specified.
2. Using a voltmeter, check the voltage and color coding of each conductor at the electrical source.
3. Connect the dispenser to the power source.
4. Place the main power switch in the "ON" position.
5. If plumbing is to be hooked-up later be sure the dispenser is disconnected from the power source. If plumbing has been hooked-up, the dispenser is ready for *Initial Fill & Heat*.

## PLUMBING REQUIREMENTS

This dispenser must be connected to a **cold water** system with operating pressure between 20 and 100 psi (138 and 690 kPa). This water source must be capable of producing a minimum flow rate of 4.5 fl. oz. (133.1 ml) per second. A shut-off valve should be installed in the line before the dispenser. Install a regulator in the line when pressure is greater than 100 psi (690 kPa) to reduce it to 50 psi (345 kPa). The water inlet fitting is .25" (9.52 mm) flare.

**NOTE** - At least 18 inches (457 mm) of an FDA approved flexible beverage tubing, such as reinforced braided polyethylene or silicone, before the dispenser will facilitate movement to clean the countertop. Bunn-O-Matic does not recommend the use of a saddle valve to install the dispenser. The size and shape of the hole made in the supply line by this type of device may restrict water flow.

**As directed in the International Plumbing Code of the International Code Council and the Food Code Manual of the Food and Drug Administration (FDA), this equipment must be installed with adequate backflow prevention to comply with federal, state and local codes. For models installed outside the U.S.A., you must comply with the applicable Plumbing /Sanitation Code for your area.**

**NOTE** - If a backflow prevented is required by code, a shock arrestor should be installed between backflow preventer and dispenser. Installing the shock arrestor as close to the dispenser as possible will provide the best results.

**NOTE** - Water pipe connections and fixtures directly connected to a potable water supply shall be sized, installed and maintained in accordance with federal, state and local codes.

## PLUMBING HOOK-UP

1. Flush the water line and securely attach it to the flare fitting on the bottom of the dispenser.
2. Turn-on the water supply.

## OPERATING CONTROLS AND INTERFACE

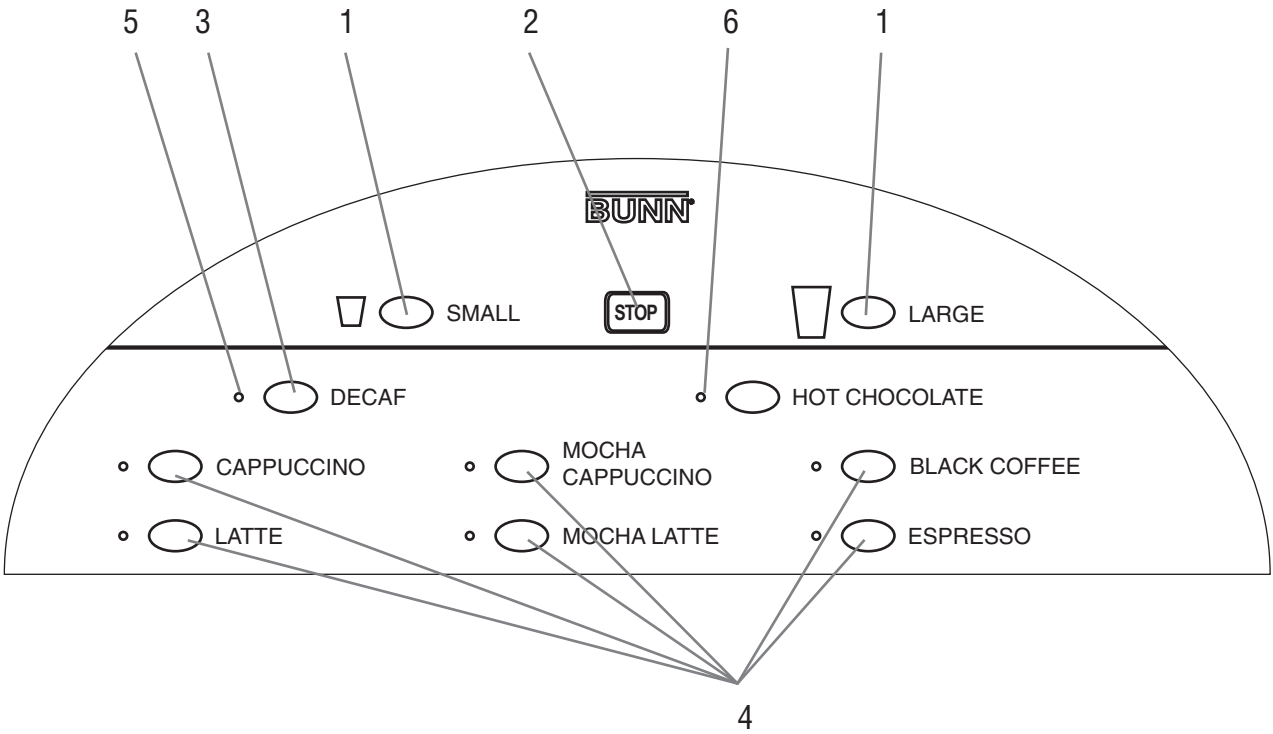
1. Cup Size Buttons: Momentarily pushed to select beverage size to dispense.
2. Stop Button: Momentary pushed to stop dispensing.
3. Decaf Button: Momentarily pushed to select Decaffeinated coffee.
4. Dispense Buttons: Momentarily pushed to dispense selected beverage.
5. Decaf refill LED: Illuminates when left (Decaf) concentrate can needs replaced.
6. Coffee (Hot Chocolate) refill LED: Illuminates when right (Regular) concentrate can needs replaced.
7. Main Power Switch: Removes AC power to tank heater and control circuits.
8. Function Selector Switch: Allows the user to select different dispensing functions (*Located behind the splash guard panel*)
  - a. Rinse: Dispenses hot water only- Flushes the powder and coffee mixing chambers and dispense lines and tips.
  - b. Prime: Dispenses concentrates only – Primes concentrate pumps.
  - c. Normal: Normal dispense mode – Dispenses mixed product.
9. Mode Selector Switch: Allows the user to select different operating modes.
  - a. Run: Normal operating position.
  - b. Night: Anti-pilfering mode that disables dispensing, but keeps heater and chiller operational.
  - c. Program: Enables programming and set up of the dispenser.
10. Programming Switches: Used in conjunction with the LED display to program and calibrate the dispenser to customer specific requirements.
  - a. Menu: used to scroll to the next menu screen.
  - b. (+): used to increase the display value.
  - c. (-): used to decrease the display value.
11. LED Display: Displays programming menus and fault messages.

**WARNING** – The NIGHT Mode does not remove AC power from the dispenser. Disconnect power source before servicing the dispenser.



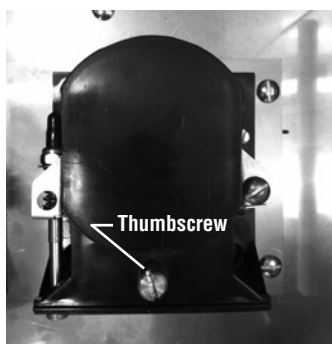


# OPERATING CONTROLS (Continued)

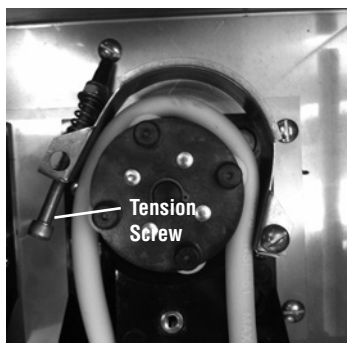


## INSTALLING PUMP TUBING

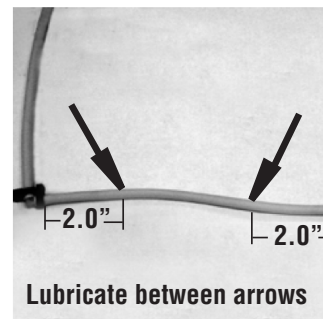
1. Loosen the thumbscrews securing the tubing retainer plates to the pump bodies and set the retainer plates aside.
  2. Depress the tension screws and remove them from the notch in the pump body, releasing the spring tension on the pump bands.
  3. Apply lubricant (BUNN-O-Matic part no. M2531.0001) to the middle section of the new pump tubing.
  4. Insert the free end of the pump tubes over the elbow fittings in the bottom of the product section as far as possible.
  5. Carefully wrap the new tubing around the rotors, making sure that the elbows end up parallel to the rotor face.
  6. Depress the tension screws and insert it in the notch in the pump body, reapplying spring tension on the pump bands.
  7. Replace the tubing retainer plates and tighten the thumbscrews.
  8. Open the product containers and screw pump tube connector to coffee container fitting.
- Note:** Replacement Tube Kits can be purchased from BUNN-O-MATIC. Order part no. 37500.0206
9. Prime the pumps. Refer to Priming the Concentrate Lines section.



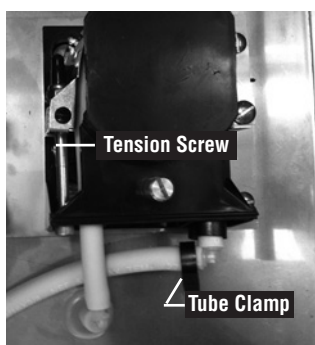
Remove Retaining Plate



Release Spring Tension



Lubricate New Tube



Pump Tubing Installed



## INITIAL FILL & HEAT

1. Turn on the water supply and connect the dispenser to the power source.
2. Water will automatically flow into the tank to the proper level and then shut-off. This will take less than ten minutes.
3. A tank full of cold water will take approximately fifty minutes for the water to heat at 120 volts, approximately 15 minutes at 240 volts.
4. Fill the hoppers with the dry product to be dispensed. Hot chocolate in the left hopper, powder milk product in the right hopper.
5. The LED display on the control panel behind the door splash panel will alternately display the tank water temperature and the cold shoe temperature.

## LIQUID LEVEL CONTROL

The system automatically maintains the hot water tank's level by energizing the refill solenoid when the water level drops below the liquid level probe. If the system has not successfully refilled in 15 minutes, a refill error occurs. When a refill error occurs, the refill solenoid is de-energized. Once the cause of the refill error has been investigated and cured, the system can be reset by both disconnecting (for at least 5 seconds) and then reconnecting the power to the machine.

## RINSE ALARM FEATURE

Periodic rinsing of the mix chambers and dispense tips is essential for proper maintenance and optimum performance of the dispenser. The dispenser is shipped from the factory with the rinse timer enabled.

The rinse timer automatically keeps track of the time since the dispenser was last run through a rinse sequence. If the dispenser detects that a rinse sequence has not been run for the desired time, all LEDs' on the membrane switch on the front door will flash, and "**RINSE**" will be displayed on the LED display behind the door splash panel.

Rinse Procedure:

1. Open the front door and place the Normal/Program/Rinse switch in the **RINSE** position.
2. Place a large container under the dispense nozzle. Press any dispense button on the front door. The LED display above the programming buttons will begin counting down from 8. The rinse will terminate when the display reaches "0".
3. Return the Normal/Program/Rinse switch to the **NORMAL** position, and close the front door.

## EMPTY PRODUCT WARNING

The dispenser will automatically illuminate the LED next to the Decaf or Hot Chocolate button when the Decaf or Regular coffee BIB is empty, respectively. The Refill message is triggered when conductance sensor reading drops below the minimum setting. The factory set minimum is 450 and should be correct for many locations. However, in some areas the hardness of the local water supply will affect this reading. It is recommended that the Empty Product Threshold be calibrated upon installation for proper operation of the Empty Product Warning. See "Field Calibrating the Empty Product Warning" in the Calibration section of this manual.

## SLCA-7 PROGRAMMING

**Program Mode:** Used to change or enter new set-up values.

To enter the **Program Mode**, Set the RUN/NIGHT/PROGRAM Switch to the **PROGRAM** position, the unit will display “\_\_PPP” to indicate it is in the Program Mode. Use the **MENU** switch to scroll to the next display. Use the Increase (+) and Decrease (-) switch to adjust the values.

LED DISPLAY	PROGRAM MODE	DESCRIPTION
<div>01</div> <div>190</div> <div>MENU (-) (+)</div>	Tank Temperature	Default = 190°F
<div>02</div> <div>180</div> <div>MENU (-) (+)</div>	Set Tank Ready Temperature	Default = 180°F
<div>03</div> <div>155</div> <div>MENU (-) (+)</div>	Refill Threshold	Set tank refill threshold Default = 155
<div>04</div> <div>run</div> <div>MENU (-) (+)</div>	Left hopper motor	Press any beverage dispense switch, left hopper motor will run for 10 seconds.
<div>04</div> <div>76</div> <div>MENU (-) (+)</div>	Left hopper motor	Set left hopper auger power level Default = 76
<div>05</div> <div>run</div> <div>MENU (-) (+)</div>	Right hopper motor	Press any beverage dispense switch, right hopper motor will run for 10 seconds.
<div>05</div> <div>83</div> <div>MENU (-) (+)</div>	Right hopper motor	Set right hopper auger power level Default = 83

## PROGRAMMING (Continued)

### LED DISPLAY

0	6		3	0
---	---	--	---	---

○  
MENU

○  
(-)

○  
(+)

0	7		3	0
---	---	--	---	---

○  
MENU

○  
(-)

○  
(+)

0	8		1	0
---	---	--	---	---

○  
MENU

○  
(-)

○  
(+)

0	9		1	0
---	---	--	---	---

○  
MENU

○  
(-)

○  
(+)

1	0	4	5	0
---	---	---	---	---

○  
MENU

○  
(-)

○  
(+)

1	1	1	1	0
---	---	---	---	---

○  
MENU

○  
(-)

○  
(+)

1	2	1	5	0
---	---	---	---	---

○  
MENU

○  
(-)

○  
(+)

### PROGRAM MODE

Left Dispense Ratio

Right Dispense Ratio

Left Espresso Ratio

Right Espresso Ratio

Empty Product Threshold

Small Cup Dispense Time

Large Cup Dispense Time

### DESCRIPTION

Set Decaf Coffee Ratio  
Default = 30:1

Set Regular Coffee Ratio  
Default = 30:1

Set Left Espresso Ratio  
Default = 10:1

Set Right Espresso Ratio  
Default = 10:1

Set Conductance Threshold  
Default = 450

Set Small Cup Dispense time Default=  
11.0 seconds

Set Large Cup Dispense time Default=  
15.0 seconds

## PROGRAMMING (Continued)

### LED DISPLAY

**13** **1.8**

○  
MENU

○  
(-)

○  
(+)

**14** **0.5**

○  
MENU

○  
(-)

○  
(+)

**15** **24**

○  
MENU

○  
(-)

○  
(+)

**16** **01**

○  
MENU

○  
(-)

○  
(+)

**17** **###**

○  
MENU

○  
(-)

○  
(+)

**18** **04.3**

○  
MENU

○  
(-)

○  
(+)

**19** **08.6**

○  
MENU

○  
(-)

○  
(+)

**20** **LO**

○  
MENU

○  
(-)

○  
(+)

### PROGRAM MODE

Powder Whipper Delay Off

Powder Auger Motor Delay on

Rinse Alarm Timer

Power Up Delay

Cup Count

Small Cup Espresso Dispense Time

Large Cup Espresso Dispense Time

BIB Cabinet Vent Fan Speed

### DESCRIPTION

Set Powder Whipper Motor Delay Off time  
Default = 1.8 seconds

Set Powder Auger Motor Delay On time  
Default = .5 seconds

Displays hours for Rinse Alarm  
Default = 24 hours

Displays Time In Minutes Tank Heater Activation Will Be Delayed After Power Up  
Default = 1 minute

Shows Total Number Of Cups Dispensed, Or Individual Beverage Count When Dispense Button Is Pressed

Set Small Cup Espresso Dispense Time  
Default = 4.3 seconds

Set Large Cup Espresso Dispense Time  
Default = 8.6 seconds

Set BIB Cabinet Vent Fan Speed To LO or HI  
Default = LO

## PRIMING THE CONCENTRATE LINES

1. Open the dispenser door.
2. Select **Prime** on the Function Selector Switch and **Run** on the Mode Selector Switch.
3. Close the dispenser door.
4. Place a container under the dispense tip.
5. Activate the appropriate dispense button, "Small" cup button for Left Pump, "Large" cup button for Right Pump, until concentrate flows from the dispense nozzle. Priming may take 10 to 20 seconds.
6. Open the dispenser door; select **Normal** on the Function Selector Switch.

**Note:** Concentrate may continue to drip out of dispense tip. The user may wish to Rinse (refer to Rinsing) the dispenser to clean out the remaining concentrate.



## DRAINING THE HOT WATER TANK

**CAUTION** - The dispenser must be disconnected from the power source throughout these steps

1. Disconnect the dispenser from the power source.
2. Open front door and place Main Power Switch in the **OFF** position and let the water in the tank cool before draining.
3. Shut off and disconnect the incoming water supply.
4. Remove the drip tray and access panels below the door.
5. Pull the clamped end of the silicone tube out of the dispenser and direct it into a drain or a container large enough to hold the volume of water in the tank, 4.0 gallons.
6. Make certain the shut off clamp is locked tightly on the tube, and then remove the snap type clamp and plug from end of tube.
7. Carefully release the shut off clamp to let the water drain from the tank.

**NOTE** - The dispenser must be refilled using the INITIAL FILL & HEAT steps before reconnecting to the power source.

## OPERATING THE DISPENSER

**Set the Function Selector Switch to NORMAL and the Mode Selector Switch to RUN**

1. Place a cup on the drip tray beneath the center dispense nozzle.
2. In area marked “**1**” of the control panel:
  - a. Select desired beverage size, small or large cup. This selection is mandatory for dispensing.
3. In the area marked “**2**” of the control panel:
  - a. **REGULAR** coffee is the default, and no selection is required for **REGULAR** coffee. Press the **DECAF** button if a decaffeinated beverage is desired.
  - b. Press the button to dispense the desired beverage. Dispensing is portion controlled, and will automatically stop when correct amount of beverage has been dispensed.
4. Pressing the STOP button in the center of the control panel will stop dispensing.



## CLEANING & PREVENTATIVE MAINTENANCE

**General Cleaning and Sanitizing Procedures Note:** The BUNN® SLCA-7 dispenser incorporates a “user selectable” rinse reminder feature, which flashes the LED’s on the front panel when it is time to rinse.

### Daily: RINSING

1. Open the front door and place the Normal/Program/Rinse switch in the **RINSE** position.
2. Place a ½ gal (2 liter) container under the dispense nozzle. Press any dispense button on the front door. The LED display above the programming switches will begin counting down from “8”. The rinse will terminate when the display reaches “0”.
3. Return the Normal/Program/Rinse switch to the **NORMAL** position, and close the front door.

### Daily: PARTS WASHING

1. Remove and wash the drip tray and drip tray cover in a mild detergent solution. Rinse thoroughly.
2. Wipe the splash panel, dispense nozzles, door, and cabinet with a clean damp cloth.

### Weekly: SANITIZING

1. Open the dispenser door.
2. Select **PRIME** on the Function Selector Switch and **RUN** on the Mode Selector Switch.
3. Remove the bag connector from the product BIB and disassemble or prop open the internal valve to allow flow of product through the connector.

**NOTE:** Cutting the mating fittings from an empty bag makes an excellent “free flowing” connector for this purpose.

4. Place the bag connector into a one-gallon (3.8 liter) container of warm soapy tap water 140°F (60°C).
5. Place an empty container under dispense tip and activate the corresponding pump until the clean soapy water is dispensed from the dispense tip.
6. Repeat steps 4 and 5 with warm tap water 140°F (60°C) to rinse the soapy water from the pump tubing. Continue dispensing until the water is clear, and no soapy water is being dispensed.
7. Prepare 2.5 gallons (9.46L) of sanitizing solution by dissolving 1 packet of Kay 5 sanitizer into 2.5 gallons (9.46L) of 120°F (48.9°C) water to ensure 100 ppm of available chlorine.
8. Again, repeat steps 4 and 5 with the sanitizing solution. Once sanitizing solution is visible, continue to dispense for 1 minute. Release handle and allow solution to sit for 5 minutes.
9. After soaking for 5 minutes, activate the dispense switch a second time, this time for 2 minutes. After 2 minutes, release the dispense switch.
10. Repeat step 6 to flush out the sanitizing solution from the pump tubing.
11. Remove the mating connector from the bag connector.
12. Reattach the bag connector to product box.
13. Select **NORMAL** on the Function Selector Switch and **RUN** on the Mode Selector Switch.
14. Activate the dispenser until concentrate/water mixture appears. Then dispense 12 ounce (354.9 ml) glass of concentrate/water mixture and discard.
15. Repeat steps 1 through 14 for other dispense head.
16. Wipe internal and external surfaces with a clean, damp cloth.

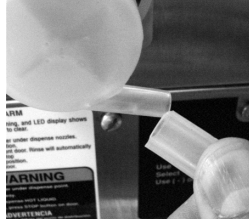
## Weekly: Parts Washing and Sanitizing



1. Remove elbows from both hoppers.



2. Remove elbows from middle and right mixing chambers, twisting slightly to help release.



3. Remove dispense hose from left whipping chamber by sliding it to the right.



4. Remove upper mixing bowl from left chamber by pulling out and up.



5. Rotate tab at bottom of mixing chamber bases counter clock wise to release base.



6. Remove mixing chambers by pulling straight out.



7. Remove middle and right frother disk from shaft by pulling straight out.

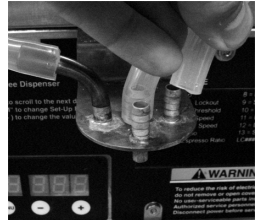


8. Remove left frother from shaft by pulling straight out.

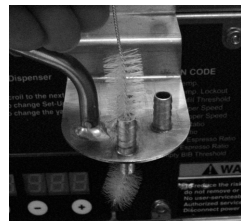


9. Rotate tab on mixing chamber base further counter clock wise, and remove from shaft by pulling straight out.

**NOTE:** Insure O-ring and shaft seal are in place during re-assembly.



10. Remove dispense hoses from dispense nozzle assembly.

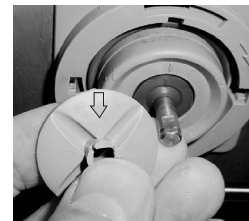


11. Clean all parts removed in warm soapy water. Use Bunn P/N 33685.0000 cleaning brush provided to clean bores and orifices. Rinse in cold water.

12. Prepare one-gallon (3.8 liter) of sanitizing solution with at least 100 ppm of available chlorine in 120°F (48.9°C) water. Soak all cleaned parts in sanitizing solution for 5 minutes, then rinse thoroughly in cold water, and dry.

13. Rinse cleaning brush, dip in sanitizing solution, and brush the bore of each of four dispense nozzles.

**NOTE:** Repeat this procedure for each nozzle separately.



14. When reassembling parts, be sure to align arrow on frother disk with flat on whipper motor shaft, and rotate tab on whipper base clock wise to the vertical position to lock mixing chamber.



15. When reassembling left frother, be sure to align raised bar on top of frother shaft with the flat on whipper motor shaft.

## PREVENTIVE MAINTENANCE

Bunn-O-Matic® Corporation recommends that preventive maintenance be performed at regular intervals. Maintenance should be performed by a qualified service technician. For Technical Service, contact Bunn-O-Matic® Corporation at 1-800-286-6070.

**NOTE: Replacement parts or service caused by failure to perform required maintenance is not covered by warranty.**

## REPLACING THE PUMP TUBING

The pumps and tubing used in the dispenser are designed to give maximum performance and long life. However, the tubes are a wear item and must be replaced periodically. How long the tube last is dependent on usage and properties of the concentrate. Excessive wear will reduce the output of the pumps resulting in a weak mixed beverage. **Bunn-O-Matic recommends replacing the Pump Tubing a minimum of once every 6 months or sooner if warranted.**

Refer to the Tube Replacement Instruction inside the Cabinet door.

**Note:** To avoid concentrate spills, rinse the pump tubing with warm tap water prior to removing the tubes, (Refer to steps 1 - 4 of the Weekly Sanitizing instructions).

1. Disconnect pump tube connector from product box by turning connector counterclockwise. Repeat for other pump and product box.
2. Remove product box from product shelf, and remove product shelf from machine by sliding forward.
3. Refer to *INSTALLING PUMP TUBING*, page 8.

## CALIBRATING THE DISPENSER

**CALIBRATION MODE:** The SLCA-7 is calibrated at the factory and does not normally need to be re-calibrated. To enter the **Calibration Mode**, Set the RUN/NIGHT/PROGRAM Switch to the **PROGRAM** position and then hold the **MENU** switch down for 10 seconds.

LED DISPLAY	CALIBRATION MODE	DESCRIPTION
<div>C1</div> <div>run</div> <div>MENU (-) (+)</div>	Left Pump Cal.	Set PRIME-NORMAL-RINSE switch to PRIME position. Press the SMALL button, left pump will run for 100 counts
<div>C1</div> <div>43.0</div> <div>MENU (-) (+)</div>	Left Pump Cal.	Enter ml collected from the 100 count test above. Default = 43.0 ml
<div>C2</div> <div>run</div> <div>MENU (-) (+)</div>	Right Pump Cal.	Set PRIME-NORMAL-RINSE switch to PRIME position. Press the LARGE button, left pump will run for 100 counts
<div>C2</div> <div>43.0</div> <div>MENU (-) (+)</div>	Right Pump Cal.	Enter ml collected from the 100 count test above. Default = 43.0 ml
<div>C3</div> <div>run</div> <div>MENU (-) (+)</div>	Left Coffee Water Rate	Set PRIME-NORMAL-RINSE switch to RINSE position Press the SMALL button, left pump dilution water will run for 20 seconds.
<div>C3</div> <div>.414</div> <div>MENU (-) (+)</div>	Left Coffee Water Rate	Enter Liters collected from 20 sec. test above Default = .414

## CALIBRATING THE DISPENSER (Continued)

LED DISPLAY	CALIBRATION MODE	DESCRIPTION
<div>C4</div> <div>run</div> <div>MENU (-) (+)</div>	Right Coffee Water Rate	Set PRIME-NORMAL-RINSE switch to RINSE position Press the LARGE button, right pump dilution water will run for 20 seconds.
<div>C4</div> <div>.414</div> <div>MENU (-) (+)</div>	Right Coffee Water Rate	Enter Liters collected from 20 sec. test above Default = .414
<div>C5</div> <div>E00</div> <div>MENU (-) (+)</div>	Displays fault	Use the (+) or (-) button to scroll forward or backward through faults.
<div>C6</div> <div>- - -</div> <div>MENU (-) (+)</div>	Reset Factory Defaults	Resets all set up values to the Factory Default Setting. Hold both Increase (+) and Decrease (-) buttons for 10 seconds
<div>CP</div> <div>0XX</div> <div>MENU (-) (+)</div>		Displays Software Version #- Exits to home view after 3 sec.

# TROUBLESHOOTING GUIDE

## Error Codes

When an error has occurred, all Door LED's will be flashing. Open the Door to access the LED Display and record the Error Code. Refer to the list of Error Codes below to identify the problem. A troubleshooting guide is provided to suggest probable causes and remedies for the most likely problems encountered. If the problem remains after exhausting the troubleshooting steps, contact the Bunn-O-Matic Technical Service Department.

LED DISPLAY	ERROR	DESCRIPTION/TROUBLESHOOTING
<div>EC 001</div> <div>○ (-) ○ (+)</div> <div>MENU</div>	Left (Decaf) Pump Failure	Left Motor or RPM Sensor Failure. Check Motor and RPM sensor wires for shorts or open connections
<div>EC 002</div> <div>○ (-) ○ (+)</div> <div>MENU</div>	Right (Regular) Pump Failure	Right Motor or RPM Sensor Failure. Check Motor and RPM sensor wires for shorts or open connections
<div>EC 003</div> <div>○ (-) ○ (+)</div> <div>MENU</div>	Heating Time Too Long	Tank Heater ON Continuous For More Than 1.5 Hour. Check heater wires for open connections.
<div>EC 004</div> <div>○ (-) ○ (+)</div> <div>MENU</div>	Fill Time Too Long	Fill Valve ON Continuous For More Than 15 minutes. Water Turned OFF. Refill Valve disconnected. Faulty Valve.
<div>EC 007</div> <div>○ (-) ○ (+)</div> <div>MENU</div>	Tank Temp Sensor Failed	Sensor Reading Out Of Range (High or Low). Faulty Sensor wiring.
<div>EC 010</div> <div>○ (-) ○ (+)</div> <div>MENU</div>	Overflow Switch Fault	Water In Overflow Cup. Check liquid level probe in tank lid for lime buildup. Check level probe wiring for open circuit.



## Field Calibration of the Concentrate Pumps, Dispenser Flow Rates, and Hopper Powder Throw

The factory set default values for the Pump & Dispenser Flow Rates are very accurate and typically do not need to be field calibrated. However, if the mix ratio accuracy is ever in question, this procedure can be used to recalibrate the unit in the field. Equipment Required:

- 50 or 100 ml graduated cylinder, with 1 ml graduations.
- 1000 ml graduated container.

**NOTE:** You can calibrate either the Concentrate Pump, Dispenser Flow Rate and set the Hopper Throw Rate independently. Simply scroll through the menu screen to the desired section and perform only those steps. (Refer to Calibrating the Dispenser)

### Calibrating the Concentrate Pumps.

#### Decaf Coffee - Concentrate Pump Calibration

1. Open the door of the dispenser and select PROGRAM on the Mode Selector Switch.
2. Depress and Hold the MENU switch for approximately 10 sec. The unit will display "C1 run" when it has entered the Calibration Mode.
3. Select PRIME on the Function Selector Switch.
4. Remove the elbow from the Left (Decaf) Coffee Mixing Chamber and place a container under the mixing chamber outlet. Press the SMALL cup button. The dispenser will display a 100 count down and then shut the pump OFF automatically. Release the dispense switch.
5. Stop priming and allow the tip to stop dripping. Discard the concentrate collected.
6. Place a 50 ml graduated cylinder under the Left (Decaf) Coffee Mixing Chamber outlet.
7. Press the SMALL cup button. The dispenser will display a 100 count down and then shut the pump OFF automatically. Release the dispense switch.
8. Keep the graduated cylinder under dispense tip until all the concentrate has dripped out.
9. Measure the volume of concentrate collected in the graduated cylinder.

The acceptable range for the volume of concentrate collected is 40 - 48 ml

10. If the amount collected is not within the acceptable range, empty the graduated cylinder and repeat STEPS 6 – 9.
11. If the amount collected is still not within range, replace the pump tubing with a new Tube Kit, (refer to the Tube Replacement Instructions).
12. When satisfied with the volume of concentrate collected, press the MENU switch. The current Calibration volume "C1 XX" will be displayed.
13. Use the (-) / (+) keys to adjust number displayed to the amount measured in STEP 9.

#### Regular Coffee - Concentrate Pump Calibration

Depress the MENU button to display the Regular Concentrate Pump calibration menu "C2 run". Repeat STEPS 3 – 13 above for the right side "Regular" pump, using the LARGE cup button.

(Continued)

## **Calibrating the Dispenser Flow Rates**

### Decaf Coffee - Dispenser Flow Rate Calibration

1. Select RINSE on the Function Selector Switch, and PROGRAM of the Mode Selector Switch. Depress and Hold the MENU switch for approximately 10 sec. The unit will display "C1 run" when it has entered the Calibration Mode
2. Press the MENU button to display the Decaf Coffee Flow Rate calibration menu "C3 run"
3. Reconnect the elbow to the Left (Decaf) Coffee Mixing Chamber outlet. Place a container under Dispense Tip and depress the SMALL cup button. A steady stream of water comes out the tip (20 seconds).
4. Allow the tip to stop dripping. Discard the water collected
5. Place a 1000 ml graduated container under Dispense Tip.
6. Press the DECAF dispense button. The dispenser will display a 20 second count down timer and then stop dispensing automatically.
7. Keep the graduated container under dispense tip until all the water stops dripping.
8. Measure the volume of water collected in the graduated container.  
The acceptable range for the volume of water collected is .39 - .43 liters
9. If the amount of water collected is not within the acceptable range, empty the graduated container and repeat STEPS 5 – 8.
10. If the amount collected is still not within range, inspect the dispense valves, tubing and mix chamber for lime, kinks or other obstructions.
11. When satisfied with the volume of water collected, press the MENU switch. The current Water Calibration volume "C3 XX" will be displayed.
12. Use the (-) / (+) keys to adjust number displayed to the amount measured in STEP 8.

### Regular Coffee - Dispenser Flow Rate Calibration

Depress the MENU button to display the Regular Coffee Flow Rate calibration menu "C4 run".

Repeat STEPS 3 – 12 above for the right side Regular dispense valve, using the LARGE cup button.

## **Field Calibrating the Empty Product Warning**

The dispenser will automatically illuminate the LED next to the Decaf or Hot Chocolate button when the Decaf or Regular coffee BIB is empty. The Refill message is triggered when the conductance sensor reading drops below the minimum setting. The factory set minimum is 450 and should be correct for many locations. However, in some areas the harness of the local water supply will affect this reading. If the Refill message doesn't come on when the container is empty, or the message comes on too early and there is still concentrate in the container, use the following procedure to find the correct Empty Product Threshold.

### Calibrating The Empty Product Threshold

1. Remove the coffee concentrate BIB(s) from the Unit
2. Open the dispenser door to access the digital programming module with LED
3. Place a large container under the dispenser tip.
4. Place the NORMAL/PROGRAM/RINSE switch into the RINSE position
5. Press any dispense button on the door. The unit will automatically rinse for eight seconds. Repeat until the water exiting the coffee nozzle is running clear.
6. Place the NORMAL/PROGRAM/RINSE switch into the RUN position.
7. Press the LARGE and the BLACK COFFEE button. Observe the numbers display on the LED panel, the conductance reading will be displayed. (NOTE: It is typical for this number to fluctuate (+/-25) about the nominal value.) This is the conductance of the water in your area. Record this reading.
8. Repeat steps six and seven, only pressing LARGE, DECAF and BLACK COFFEE button. Record this reading.

9. Install the coffee BIB's into the unit, and prime the pumps. Dispense several cups of both regular coffee and Decaf coffee. If either one or both the DECAF and HOT CHOCOLATE LED illuminates during this process and dispensing is disabled, the EMPTY PRODUCT WARNING can be reset by priming the appropriate pump momentarily.
10. After several cups of both coffees have been dispensing, dispense both a REGULAR coffee and a DECAF coffee. Observe the conductivity reading for each, and record.
11. Take the average of the largest reading from steps seven and eight with the lowest reading from step ten, and enter this new value in the Empty BIB threshold position, "P10 XXX", see Programming the dispenser. Example, if the conductance readings with water from steps six and seven are 225 and 250, and the conductance readings with coffee from step ten is 355 and 370, you would average 250 and 355, and enter "302" for the empty BIB threshold in "P10 XXX".

### **Field Adjustment of Powder Hoppers**

The powder throw for the powder products is pre-set from the factory. It can be checked and adjusted in the field using this calibration procedure.

#### Adjusting the Hopper Throw Weight

1. Open the dispenser door to access the digital programming module with LED.
2. Remove the mixing chamber below the hopper outlet elbow.
3. Select PROGRAM on the Function Selector Switch, and NORMAL for the Mode Selector Switch.
4. Press the MENU button to display the Left Hopper Motor calibration menu "04 run"
5. Hold a container under the hopper outlet elbows, and press any beverage button on the front door.
6. The left hopper will run automatically for 10 second, and then stop.
7. Weight the contents of the container. Divide by 10 to determine grams or ounce per second of throw.
8. Press the MENU button to increment the display to menu "04 XXX". The number displayed is the power level drive of the hopper motor. The power level can be increased or decreased by pressing (-) or (+) button. Each increment is equal to approximately a 1% increase or decrease in hopper motor speed.
9. Press the MENU button to display the Right Hopper Motor calibration menu "05 run".
10. Repeat steps 5 – 8 to measure and adjust the right hopper throw weight.
11. Replace the powder-mixing chamber, and return the Function Selector Switch to the RUN position.

# ELECTRICAL WIRING DIAGRAM SLCA-7

